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# ENTRANCE EXAMINATION PAPERS

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## ENGLISH I

### Part I—Composition

[Plan carefully before writing. Allow time for revision.]

1. Write an expository theme of about 400 words on one of the following topics :

- a. The manufacture of paper (or glass or brick.)
- b. The aims of the Red Cross.
- c. How a lawn-mower works.
- d. The cultivation of grapes (or tobacco or buckwheat or sugar beets.)
- e. Why should I study a foreign language?
- f. My reasons for entering Cornell.
- g. My important work during the past summer.
- h. The spread of democracy.
- i. Personal advantages of the study of poetry.
- j. The purification of water.

2. Write a descriptive or a narrative theme of about 200 words on one of the following topics :

- a. Our newsboy.
- b. Paving a new street.
- c. A visit at grandfather's farm.
- d. A real person who reminds me of a character in fiction.
- e. An incident in the history class.
- f. When the train is late.
- g. "The old swimming hole."
- h. Hunting rabbits.

### Part II—Grammar

1. Write in separate columns (a) the pronouns, (b) the subordinate verbs with their subjects, (c) the phrases in the following sentence :

I knew who the subject of the statue was, a brave naval officer and bold explorer, who had lost his life in a futile effort to achieve an almost equally futile object.

2. Rewrite the sentence below, correcting the violations of grammar and usage. Explain each correction.

The officer in charge, as well as his subordinates and their servants, were prepared to promptly quell any disturbance in back of the lines.

## ENGLISH II

[Answer one question in each group.]

### Group I—Plays

1. O, what a noble mind is here o'erthrown !  
The courtier's, soldier's, scholar's, eye, tongue, sword ;  
The expectancy and rose of the fair state,  
The glass of fashion and the mould of form,  
The observed of all observers, quite, quite down !

Who speaks these lines? To whom do they refer? Show how they are (or are not) an adequate description of that person.

2. But 'tis a common proof,  
That lowliness is young ambition's ladder,  
Whereto the climber-upward turns his face ;  
But when he once attains the upmost round,  
He then unto the ladder turns his back,  
Looks in the clouds, scorning the base degrees  
By which he did ascend.

Who speaks these lines? Whom has the speaker in mind? What bearing has the thought here expressed upon the speaker's subsequent actions?

3. Thou hast it now : King, Cawdor, Glamis, all,  
As the weird women promised, and, I fear,  
Thou play'dst most foully for't : yet it was said  
It should not stand in thy posterity,  
But that myself should be the root and father  
Of many kings.

Who speaks these lines? To whom does *thou* refer? Of what earlier scene or scenes is the speaker here thinking? To what does he allude in *most foully*?

## Group II—Poems

1. Give an account of Arthur's last battle and its results.
2. Mention, with reference to specific poems or with appropriate quotations, some recurring ideas in Wordsworth's lyrics. Have you found similar ideas in other poets of Wordsworth's time? Explain.
3. Why is *Lycidas* called a *pastoral elegy*? Account for the mention of St. Peter in *Lycidas*. What do these lines mean :

Were it not better done, as others use,  
To sport with Amaryllis in the shade,  
Or with the tangles of Neaera's hair?

4. Describe the scene in the great hall when Galahad sat in Merlin's chair.
5. Till the *livelong* daylight fail :  
Then to the spicy nut-brown ale,  
With stories told of many a *feat*,  
How Faery *Mab* the *junkets* eat.

From what poem are these lines taken? What "stories" are alluded to in lines that follow? Explain the italicized words. Scan two lines.

## Group III—Orations

1. Give the substance of Lincoln's "words to Republicans" in the speech at Cooper Union.
2. Explain some of the devices by which Burke makes his speech on conciliation clear, coherent, and forcible.
3. Webster said at Bunker Hill, "We learn from the result of this experiment how admirably the character of our people was calculated for making the great example of popular governments." Explain what Webster meant.
4. For what argumentative purposes does Macaulay, in his speeches on copyright, mention Johnson, Madame D'Arblay, Jane Austen, Milton, and Wesley?

## Group IV—Essays

1. What were Dr. Johnson's qualifications as a lexicographer, as a biographer, and as an essayist?

2. Carlyle says, "The Edinburgh learned of that period were in general more noted for clearness of head than for warmth of heart." What does the sentence mean? What application of the thought does Carlyle make to Burns?

3. From Emerson's essay show how power, fortune, and fashion are related to the conception of *gentleman*.

## GREEK

### A. XENOPHON

#### 1. *Translate into English :*

(a). οὐ πολλῶ δὲ ὕστερον ἀπὸ τοῦ αὐτοῦ σημείου οἱ τ' ἔνδον συνελαμβάνοντο καὶ οἱ ἔξω κατεκόπησαν. μετὰ δὲ ταῦτα τῶν βαρβάρων τινὲς ἱππέων διὰ τοῦ πεδίου ἐλαύνοντες ὥτινι ἐντυγχάνοιεν Ἑλληνι ἢ δούλῳ ἢ ἐλευθέρῳ πάντας ἔκτεινον. οἱ δὲ Ἕλληνες τήν τε ἱππασίαν ἐθαύμαζον ἐκ τοῦ στρατοπέδου ὁρῶντες καὶ ὃ τι ἐποίουν ἡμφεγνόουν, πρὶν Νίκαρχος Ἀρκὰς ἦκε φεύγων τετρωμένος εἰς τὴν γαστέρα καὶ τὰ ἔντερα ἐν ταῖς χερσὶν ἔχων, καὶ εἶπε πάντα τὰ γεγενημένα.

(b) Ἄνδρες στρατιῶται, χαλεπὰ μὲν τὰ παρόντα, ὅποτε ἀνδρῶν στρατηγῶν τοιούτων στερόμεθα καὶ λοχαγῶν καὶ στρατιωτῶν, πρὸς δ' ἔτι καὶ οἱ ἀμφὶ Ἀριαῖον οἱ πρόσθεν σύμμαχοι ὄντες προδεδώκασιν ἡμᾶς· ὅμως δὲ δεῖ ἐκ τῶν παρόντων ἄνδρας ἀγαθοὺς τε εἶναι καὶ μὴ ὑφίεσθαι, ἀλλὰ πειρᾶσθαι ὅπως ἦν μὲν δυνώμεθα καλῶς νικῶντες σφζώμεθα· εἰ δὲ μή, ἀλλὰ καλῶς γε ἀποθνήσκωμεν, ὑποχείριοι δὲ μηδέποτε γενώμεθα ζῶντες τοῖς πολεμίοις· οἶμαι γὰρ ἂν ἡμᾶς τοιαῦτα παθεῖν οἷα τοὺς ἐχθροὺς οἱ θεοὶ ποιήσειαν.

### B. GRAMMAR

In passage (a) : Tell the construction of πολλῶ (line 1); and ὥτινι (line 3); Explain the mood of ἐντυγχάνοιεν (line 3); Tell the peculiarity in the form ἡμφεγνόουν (line 6).

In passage (b): Tell to what ἂν belongs and explain fully the construction of παθεῖν and ποιήσειαν (last line).



## C. COMPOSITION

1. Let us conquer those who have been drawn up before the King.
2. Cyrus feared that the King would come on the following day.
3. If you were willing to conquer some and save others, it would be well.
4. He will need arms and soldiers, if he attacks this city.

## D. HOMER

*Translate :*

- Τὸν δ' αὖτε προσέειπε θεὰ γλαυκῶπις Ἀθήνη·  
 ἦλθον ἐγὼ παύσουσα τὸ σὸν μένος, αἶ κε πίθῃαι,  
 οὐρανόθεν· πρὸ δέ μ' ἦκε θεὰ λευκώλενος Ἥρη,  
 ἄμφω ὁμῶς θυμῷ φιλέουσά τε κηδομένη τε.  
 ἀλλ' ἄγε, λῆγ' ἔριδος, μηδὲ ξίφος ἔλκεο χεῖρί· 5  
 ἀλλ' ἢ τοι ἔπεσιν μὲν ὀνειδίσον, ὥς ἔσεται περ.  
 ὧδε γὰρ ἐξερέω, τὸ δὲ καὶ τετελεσμένον ἔσται·  
 καί ποτέ τοι τρὶς τόσσα παρέσσεται ἀγλαὰ δῶρα  
 ὕβριος εἵνεκα τῆσδε· σὺ δ' ἴσχεο, πείθεο δ' ἡμῖν.  
 Τὴν δ' ἀπαμειβόμενος προσέφη πόδας ὠκὺς Ἀχιλλεύς. 10  
 χρὴ μὲν σφωῖτερόν γε, θεά, ἔπος εἰρύσσασθαι,  
 καὶ μάλα περ θυμῷ κεχολωμένον· ὧς γὰρ ἄμεινον  
 ὅς κε θεοῖς ἐπιπείθεται, μάλα τ' ἔκλυον αὐτοῦ.  
 Ἦ καὶ ἐπ' ἀργυρῇ κώπῃ σχέθε χεῖρα βαρεῖαν·  
 ἄψ δ' ἐς κουλεὸν ὥσε μέγα ξίφος, οὐδ' ἀπίθησεν 15  
 μύθῳ Ἀθηναίης· ἢ δ' Οὐλυμπόνδε βεβήκει  
 δώματ' ἐς αἰγιόχοιο Διὸς μετὰ δαίμονας ἄλλους.

1. What is the syntax of πρὸ (l. 3), of ἔριδος (l. 5), of πόδας (l. 10), of θυμῷ (l. 12), of ἔκλυον (l. 13)?
2. Tell what you know about the Iliad—its author, subject, date, length, form, etc.

## LATIN

## FIRST YEAR LATIN

1. Write the genitive and ablative singular and the genitive and accusative plural of : *aestas, deus, eques, salus, quisque, ego, eadem domus, vulnus*.

2. Give the positive, comparative and superlative degrees of the adverbs derived from : *acer, diligens, fortis, multus, verus, facilis*.

3. Give a synopsis in the second person plural (indicative and subjunctive, active and passive) of : *icio, servo*.

4. Give the principal parts of : *sentio, deligo, incendo, quaero, pello, exstruo, obsideo*.

5. *Translate into Latin, marking all long vowels in what you write :*

(a) The king ought to be obeyed by all.

(b) He can not be prevented from asking whether I am going to Athens or to some other city.

(c) I command you not to try to withdraw.

(d) When he attacked the city, I knew that it would soon be captured.

(e) If I had known who you were, I should have begged you to come with me.

6. *Translate :*

Ubi *eum* castris se tenere Cæsar *intellexit*, ne diutius com meatu *prohiberetur*, ultra eum locum, quo in loco Germani consederant, circiter *passus* sexcentos ab iis, castris idoneum locum delegit, *acieque* triplici instructa, ad eum locum venit. Primam et secundam *aciem* in armis esse, tertiam castra *munire* jussit. Hic locus ab hoste circiter *passus* sexcentos, ut dictum est, aberat. Eo circiter hominum numero sedecim milia expedita cum omni equitatu Ariovistus misit, quæ copiæ nostros perterrerent et *munitione prohiberent*.

7. Account for the mood and tense of each italicized verb and for the case of each italicized noun or pronoun in the above passage.

## II

### SECOND YEAR LATIN

1-5. Answer questions 1, 2, 3, 4 and 5 under "First Year Latin" (above.)



6. *Translate :*

Cæsar, exposito exercitu et loco *castris* idoneo capto, ubi ex captivis cognovit, quo in loco hostium copiæ *consedissent*, cohortibus decem ad mare relictis et *equitibus* trecentis, qui *præsidio* navibus *essent*, de tertia vigilia ad hostes contendit, eo minus veritus navibus, quod in litore molli atque aperto deligatas ad ancoram relinquebat; et *præsidio navibus* Quintum Atrium præfecit. Ipse noctu progressus *milia passuum* circiter duodecim hostium copias conspicatus est. Illi equitatu atque essedis ad flumen progressi ex loco superiore nostros prohibere et proelium committere cœperunt.

Account for the mood and tense of each italicized verb and for the case of each italicized noun.

## III

## THIRD YEAR LATIN

1-4. Answer questions 1, 2, 3 and 4 under "First Year Latin" (above.)

5. *Translate :*

Est etiam *nobis* is animus, Quirites, ut non modo nullius audaciae *cedamus*, sed etiam omnes improbos ultro semper laccessamus. Quod si omnis impetus domesticorum hostium, depulsus a vobis, se in me unum convertit, *vobis* erit videndum, Quirites, qua condicione posthac eos esse *velitis*, qui se pro salute vestra *obtulerint* invidiæ *periculisque* omnibus : mihi quidem ipsi quid est quod jam ad vitæ fructum *possit* adquiri, cum praesertim neque in honore vestro neque in gloria *virtutis* quicquam *videam* altius, quo mihi *libeat ascendere*?

Account for the mood and tense of each italicized verb and for the case of each italicized noun or pronoun in this passage.

6. Translate the passage in question 6 under "Second Year Latin" (above.)

7. *Translate into Latin, marking all long vowels in what you write :*

(a) The conspirators feared that Cicero would exercise severity toward them.

(b) When he hesitated, I asked him why he had not set out for home.

(c) We waited two days for your friends to bring us letters.

(d) I do not believe that death was ordained (*constituo*) by the gods for the sake of punishment.

(e) We know that if Cicero had judged it best, he would have removed Catiline.

(f) Would my reputation be injured if I should immediately withdraw?

(g) He begged us not to prevent him from obeying the orders of his chief.

(h) There was no advantage that we did not enjoy.

#### IV

#### FOURTH YEAR LATIN

##### 1. *Translate :*

Aeneas celsa in puppi, jam certus *eundi*,  
 Carpebat somnos, rebus jam rite paratis.  
*Huic se* forma dei *vultu* redeuntis eodem  
 Obtulit in somnis, rursusque ita visa monere est,  
*Omnia Mercurio* similis, vocemque coloremque  
 Et crines flavos et membra decora *juventa* :  
 “ *Nate dea*, potes hoc sub casu ducere somnos,  
 Nec, quae *te* circum stent deinde pericula, cernis,  
 Demens, nec *Zephyros* audis spirare secundos?  
 Illa dolos dirumque nefas in pectore versat,  
 Certa mori, variosque irarum concitat aestus.  
 Non fugis hinc praeceps, dum *praecipitare* potestas?  
 Jam mare turbare trabibus saevasque videbis  
 Collucere faces, jam fervere litora flammis,  
 Si te his *attigerit* terris Aurora morantem.  
 Heia age, rumpe moras : varium et mutabile semper  
 Femina.” Sic fatus *nocti* se immiscuit atrae.

Account for the mood and tense of each italicized verb and for the case of each italicized noun or pronoun.

From what book of the Aeneid is this passage taken? Write briefly on the contents of this book and also of any one of the other books of the Aeneid.

Write out the last three lines, indicating the metrical feet, the principal caesura and the length of each syllable.

2. When did Vergil live? How many books are there in the Aeneid? What else did Vergil write?

3. Give the principal parts of : *gaudeo*, *pasco*, *incumbo*, *parco* and a synopsis in the second person plural (indicative and subjunctive, active and passive) of *veho*.

4. Write the genitive and ablative singular and the genitive and accusative plural of *dives*, *homo*, *genu*, *sonitus*, *culmen*, *effigies*.

## FIRST YEAR GERMAN

N. B. State where and when you have studied German.

### I.

At the option of the candidate, 20% of the 100% may be counted on an oral test to be given in connection with this paper. Candidates not electing this oral test must answer question VII.

### II.

*Translate into English :*

(a)

Auf dem Grabe des Vaters des Prinzen war ein Rosenstrauch, ein gar herrlicher Rosenstrauch! Der blühte nur jedes fünfte Jahr, und auch dann trug er nur eine einzige Rose; aber was für eine Rose! Die duftete so süß, daß man alle seine Sorge und seinen Kummer vergaß, wenn man daran roch. Und dann 5 hatte er eine Nachtigall, die konnte singen, als ob alle schönen Melodien in ihrer kleinen Kehle säßen. Diese Rose und diese Nachtigall sollte die Prinzessin haben, und deshalb wurden sie beide in große Silberbehälter gesetzt und so ihr zugesandt.

(b)

Ein Esel war mit Salz beladen. Er kam an einen Bach, 10  
 strauchelte und fiel ins Wasser. Als er wieder aufstand, merkte  
 er, daß seine Last um vieles leichter geworden war; denn ein  
 großer Teil des Salzes war geschmolzen. Das merkte er sich  
 mit Freuden, und als er nun später wieder des Weges kam und  
 mit Schwämmen (der Schwamm=sponge) beladen war, ließ 15  
 er sich absichtlich in das Wasser nieder und hoffte, es würde mit  
 seiner Last ebenso gehen, wie früher. Aber die Schwämme  
 wurden durch das eindringende Wasser so schwer, daß der Esel  
 nicht wieder aufstehen konnte und unter der Last ertrank.

—WOLGAST, FABELN.

## III.

1. Give the principal parts, with the auxiliary of the perfect tense and the third person singular present indicative (model: *weggehen, ging weg, ist weggegangen, geht weg*) of: *trug* (3), *vergass* (5), *säßen* (7), *zugesandt* (9), *beladen* (10), *aufstand* (11), *liess---nieder* (15-16), *ertrank* (19).

2. Conjugate in the present and imperfect, indicative and subjunctive: *konnte* (6), *fiel* (11).

3. Decline in singular and plural: *der grösste Herr; unser liebes, gutes Kind; diese schöne Blume*.

4. Form German sentences illustrating the three kinds of word order.

## IV.

*Folgende Fragen sind auf deutsch in ganzen Sätzen zu beantworten:*

1. Was ist ein Prinz?
2. Wie konnte man wissen, dasz die Rose süsz duftete?
3. Beschreiben Sie einen Esel!
4. Wozu gebraucht man Salz?
5. Was ist ein Bach?



6. Wann sind Sie geboren? (write out numbers).
7. Wieviel Uhr ist es jetzt? (write out numbers).
8. Was würden Sie tun, wenn Sie heute kein Examen hätten?
9. Welche Tiere fressen Fleisch? Welche fressen Gras?

## V.

1. Copy the following sentences, substituting for the dashes the proper endings :

(a) Sie kam— mit ein— Korb aus d—Haus und ging— in d— Garten, wo unter d— Bäum— viel—Äpfel auf d— Erde lag—. (b) Geehrt— Herr! Wann werd—Sie mein— klein— Schwester d— neu— Uhr schick—, welch— Sie ihr vor acht Tag—versproch— hab—.

2. *Setzen Sie folgende Sätze in das Plural!*

(a) Die Zehe ist ein Teil des Fusses.

(b) Das ist das neue Haus dieser reichen Frau.

3. *Setzen Sie folgende Sätze in das Passiv!*

(a) Mein Freund hat das Buch gefunden.

(b) Man erlaubte ihm, die Feder zu gebrauchen.

## VI.

*Translate into German:*

1. A year ago I went to Berlin to visit my cousin.
2. After school we always play an hour before we have supper.
3. One must be able to spell a word, if one wants to write correctly.
4. She said that she had seen her friend yesterday at half-past four.

## VII.

(Only for those not taking the oral test: compare I).

Erzählen Sie in etwa 75-100 Worten irgend etwas über Ihre Heimatstadt!

## SECOND YEAR GERMAN

N. B. State where and how long you have studied German.

At the option of the candidates 20% of the 100% may be counted on an oral test to be given in connection with this paper. Candidates not electing this oral test must answer question V.

## I.

*Translate into English :*

„Eine alte, bekannte Anekdote.“

Ein junger Mensch, der kurze Zeit im Auslande gewesen war, glaubte sich bei seinen Landsleuten ein großes Ansehen zu geben, indem er viel von den Wundern und Seltsamkeiten erzählte, die er auf seinen Reisen gesehen hatte. Eines Tages, als er mit seinem Vater nach einer benachbarten Stadt ging, erzählte er demselben, wie er einst zu Lissabon einen Hund gesehen habe, der größer war als ein Pferd. „Das war allerdings ein merkwürdiger Hund,“ sagte der Vater. „Du scheinst daran zu zweifeln,“ bemerkte der Junge. „Durchaus nicht,“ antwortete ihm sein Vater, „es giebt in der Natur viele Dinge, die bei weitem merkwürdiger und fast unglaublich sind. So werden wir z. B. (zum Beispiel) bald an eine Brücke kommen, welche die sonderbare Eigenschaft hat, daß derjenige, welcher hinüber geht und am selbigen Tage gelogen hat, auf der Mitte derselben ein Bein bricht.“ Der Junge war eine Zeit lang mühsenstill, dann sprach er: „Die Wahrheit zu sagen, Vater, der Hund, von dem ich sprach, war nicht größer als ein Esel.“ „Gewiß,“ sagte der Vater, „daß war immerhin ein höchst merkwürdiger Hund.“ So gingen die beiden eine Zeit lang schweigend weiter. Da sprach der Jüngling: „Lieber Vater, geh' nicht so rasch, ich möchte noch gern einen Irrtum berichtigen, ehe wir an die Brücke kommen. Der Hund, den ich zu Lissabon sah, war nicht größer als ein Kalb.“ „Es freut mich,“ sagte der Vater, „daß du so wahrheitsliebend und gewissenhaft bist; denn siehe, hier liegt dicht vor uns die fatale Brücke.“ Da konnte sich der Junge nicht länger halten und rief ängstlich aus: „Vater, ich will es nur gestehen, der Hund war nicht größer als andre Hunde sind.“ „So ist auch diese Brücke,“ sprach lächelnd der Vater, „wie alle anderen Brücken sind, und du kannst ruhig hinübergehen, ohne zu fürchten, ein Bein zu brechen.“



## II.

1. Decline in the singular number : *ein junger Mensch* (l. 1), *einer benachbarten Stadt* (l. 5), *ein höchst merkwürdiger Hund* (l. 18); in the plural number : *lieber Vater* (l. 20), *die fatale Brücke* (l. 25).

2. Give the principal parts, the perfect tense with auxiliary, and the present indicative active, third person, of the following verbs, (model : *fortfahren, fuhr fort, ist fortgefahren, fährt fort*) : *glaubte* (l. 2), *gesehen* (l. 4), *war* (l. 7), *antwortete* (l. 9), *gelogen* (l. 14), *bricht* (l. 15), *sprach* (l. 16), *hinübergehen* (l. 29).

3. Inflect in the mood and tense in which they are found, the verbs . *gewesen war* (l. 1), *scheinst* (l. 8), *bricht* (l. 15), *rief* (l. 26).

4. Change into indirect discourse the last sentence of the above passage.

5. Copy the following sentences, substituting for the dashes the proper endings : Jeder Fremd—sieht viel Neu—und Interessant—in unser—Stadt. Aber kein Fremd—kann all das Interessant—allein finden. Er muss ein—Führer haben durch die Strass—, Gebäud—, und viel—Parkanlag—.

## III.

*Translate into German :*

A very good father, who wanted his son to tell the truth always, said to him : "My son, we are coming to a bridge, on which everyone who has told a lie on the same day must break his leg." The boy was frightened, for he had told about a dog that he claimed to have seen on his travels, which was larger than a horse. When they came to the bridge the boy confessed that the dog was not larger than other dogs.

## IV.

Bilden Sie einige deutsche Fragen und Antworten (zusammen etwa 50 Worte) über Haus und Garten.

## V.

Beschreiben Sie in deutscher Sprache (in etwa 75 Worten), die Schule, aus der Sie kommen.

## THIRD YEAR GERMAN

N. B. State where and how long you have studied German.

## I.

At the option of the candidate, 30% of the 100% may be counted on an oral test to be given in connection with this paper. Candidates not electing this oral test must answer question VI.

## II.

*Translate the following passages :*

A. In dem sonst stillen Hause, das hinter der Kirche lag, war heute mehr als sonst Geräusch, und in den untern Zimmern ein lebhaftes Hin— und Herlaufen. Man rüstete sich zu einer Fahrt über Land, worauf sich Eltern und Kinder gleich freuten, denn schon längst hatte man die Einladung lieber Freunde annehmen 5 wollen, aber bis jetzt waren Geschäftsreisen des Vaters und auch schlechtes Wetter immer dazwischen gekommen. Sämtliche Mitglieder der Familie, auch eine am selben Orte wohnende Verwandte der Mutter sollten an dem Ausfluge teilnehmen, nur Helene, die älteste Tochter hatte sich erboten, während der Ab- 10 wesenheit der Andern den Haushalt zu leiten, der wegen der vielen Arbeiten in Garten und Feld nicht gut ganz ohne Aufsicht bleiben konnte.

Als schließlich nach mancherlei Aufregung Alt und Jung mit heitersten Gesichtern im Wagen saß und dieser dann um die Ecke 15 gebogen und verschwunden war, gab Helene den beiden Hausmädchen Erlaubnis, bis zum Abend auszugehen, verschloß selbst die Haustür und ging dann auf ihr Zimmer, wo sie sich sogleich vor ihre kleine Büchersammlung setzte. Sie fühlte sich recht von Herzen froh und behaglich, daß sie nun endlich einmal so ganz 20 nach Wunsch ausruhen konnte, indem sie sich in einen Band Erzählungen von Theodor Storm versenkte.

B. Unter den Staatsmännern und Rednern, die zur Zeit des Ausbruchs der Streitigkeiten zwischen England und den nord-amerikanischen Kolonien die Aufmerksamkeit der Welt auf sich zogen, müssen wir Benjamin Franklin eine besonders hervorragende Stelle zuweisen. Denn er hat nicht nur seinem eigenen Vaterlande als Staatsmann und Diplomat die größten Dienste geleistet, sondern auch für die europäische Geschichte eine ganz außerordentliche Bedeutung erhalten. Mehr als irgend ein Anderer half er die politischen Gedanken der neueren Zeit im alten Europa verbreiten, und zwar noch stärker durch seine eigenartige Persönlichkeit als durch Wort und Schrift.

### III.

Grammatical questions based on the preceding passages for translation.

1. Give the principal parts, with the auxiliary of the perfect tense, and the third person singular present indicative (model: *weggehen, ging weg, ist weggegangen, geht weg*) of the following verbs: *lag* (1), *annehmen* (5), *gekommen* (7), *erboten* (10), *bleiben* (13), *konnte* (13), *verschwunden* (16), *zogen* (26), *zuweisen* (27), *erhalten* (30).

2. Give, with the definite article in each case, the nominative and genitive singular, and the nominative plural of: *Hause* (1), *Zimmern* (2), *Einladung* (5), *Tochter* (10), *Arbeiten* (12), *Garten* (12), *Abend* (17), *Herzen* (20), *Zeit* (23), *Gedanken* (31).

3. Decline throughout the singular only: *seinem eigenen Vaterlande* (27-28); throughout the plural only: *lieber Freunde* (5); throughout the singular and plural: *ihre kleine Büchersammlung* (19).

4. Give and explain the cases of the following words: *Land* (4), *Garten* (12), *England* (24), *sich* (25), *Franklin* (26).

5. Give the rule accounting for the form of *wollen* (6).

### IV.

Write to a distant acquaintance, using the pronoun *Sie*, a German letter of about 60 words, explaining your failure

to reply to a letter received some time before and promising a full answer as soon as certain information has been obtained from home.

## V.

*Translate into German :*

During the summer I read a German book on American history which was written by a man whom my father knew when he was a student in Heidelberg thirty-two years ago. I found it very interesting. The two Americans whom this German seems to admire more than all others are Benjamin Franklin and Abraham Lincoln. This pleases my father very much because he is of the same opinion. He had not heard of this book before the outbreak of the war, otherwise he would have written his old friend whom he has not seen since he returned to America. My father had intended to visit Europe again in 1915, but, of course, he had to give up that plan. I was very sorry for he probably would have taken me and my younger brother along.

## VI.

(Only for those who do not take the oral test).

Write an exercise in German, of about 75 words, on one of the following topics : *Warum kommen so viele Einwanderer nach Amerika ?* or *Unterschiede zwischen dem Osten und Westen der Vereinigten Staaten* or *Die Verbreitung der englischen Sprache*.

## FIRST YEAR FRENCH

Part I (one hour)

Oral Examination

Part II (two hours)

I. *Translate :*

Aussitôt les Anglais débarquèrent à Calais, pendant que le Prince Noir préparait une autre attaque par le sud. Une armée française alla à leur rencontre, mais refusa tout en-



gagement et se retira à mesure qu'ils avançaient. Les villes étaient bien défendues, aucune ne se laissa prendre, et l'expédition se borna à d'inutiles ravages dans les campagnes. Ils revinrent en 1370 ; le même système fut inexorablement suivi. La défense de combattre était si rigoureusement observée, qu'à Noyon un cavalier ennemi ayant franchi les barrières de la ville en disant : "Seigneurs, je vous viens voir ; vous ne daignez issir hors de vos barrières, et j'y daigne bien entrer," on le laissa sortir sain et sauf. Devant Reims, devant Paris, même immobilité. De son hôtel Saint-Pol, où il se tenait enfermé, le roi pouvait apercevoir les villages qui brûlaient ; mais le brave Clisson lui-même disait : "Vous n'avez que faire d'employer vos gens contre ces enragés ; laissez-les se fatiguer eux-mêmes. Ils ne vous mettront pas hors de votre héritage avec toutes ces fumières." Un Anglais s'approcha par le faubourg Saint-Jacques pour acquitter un vœu, et planta sa lance dans la porte. Les chevaliers qui gardaient la barrière applaudirent à son audace et le laissèrent aller. Mais un boucher ne put supporter cette honte : il courut après l'Anglais et l'abbatit d'un coup de hache.

V. DURUY, *Histoire de France*.

II. Give the plural of : *quel bel arbre, un grand animal*.

Give the feminine of : *un ami fidèle, un vieux Français*.

Conjugate the present indicative of *valoir*, the imperfect indicative of *arranger*, the future of *courir*, the past definite of *venir*, the past indefinite of *aller*, the present subjunctive of *vouloir*, the imperfect subjunctive of *finir*, the pluperfect indicative of *se promener*.

III. *Translate :*

1. How much snow has fallen to-day? 2. People travel a great deal in America. 3. My oldest brother has gone to see them. 4. Please give me some ink and some paper. 5. He and his mother arrived this morning. 6. I never used to lose any books. 7. His aunt and mine will go driving this afternoon. 8. He has hurt his hand. Call

the doctor at once. 9. He was born June 1, 1893 and died August 7, 1910. 10. Who are they? They are the ladies who have just sung to us. 11. If you told him I should know it. 12. I gave him some yesterday.

## SECOND YEAR FRENCH

### Part I (one hour)

#### Oral Examination

##### I. *Translate:*

A Vienne, il *arriva* à Cheverny une aventure singulière. Il *devait avoir* un soir d'hiver sa première audience de l'empereur. Il *alla* au palais; un chambellan l'y *reçut*, *le conduisit* dans deux ou trois pièces, *ouvrit* la dernière, l'y *fit* entrer, se retira de la porte même et la ferma. Entré là, il se trouve dans une pièce plus longue que large, mal meublée, avec une table tout au bout, sur laquelle, pour toute lumière dans la chambre, il y avait deux bougies jaunes et un homme *vêtu* de noir, le dos appuyé contre la table. Cheverny, assez mal édifié sur ce lieu, se *croit* dans une pièce destinée à attendre d'être introduit plus loin et se *met* à regarder à droite et à gauche et à se promener d'un bout à l'autre. Ce passe-temps dura près d'une demi-heure. A la fin, comme un des tours de sa promenade l'approchait assez de cette table et de cet homme noir qui y était appuyé, et qu'à son air et à son habit il *prit* pour un valet de chambre qui était là de garde, cet homme, qui jusqu'alors l'avait laissé en toute liberté, sans remuer ni mot dire, se prit à lui demander civilement ce qu'il faisait là. Cheverny lui répondit qu'il devait avoir audience de l'empereur, qu'on l'avait fait entrer, et qu'il attendait là d'être introduit pour avoir l'honneur de lui faire la révérence. "C'est moi, lui répliqua cet homme, qui suis l'empereur." Cheverny, à ce mot, pensa tomber à la renverse, et fut plusieurs moments à se remettre, à ce que je lui ai ouï conter. Il se jeta aux pardons, à l'obscurité et à tout ce qu'il *put* trouver d'excuses. Je pense après que son compliment fut mal



arrangé. Un autre que l'empereur en eût rit ; mais Léopold, incapable de perdre sa gravité, demeura dans le même sang-froid, qui *acheva* de démonter le pauvre Cheverny.

SAINT-SIMON, *Mémoires*.

II. Give the principal parts of the verbs in italics in the passage above. Conjugate the imperfect subjunctive of *tenir* ; the future perfect of *mourir* ; the imperfect indicative of *craindre* ; the conditional of *savoir*.

III. *Translate :*

1. We must begin at once, because we are late. 2. I forget words more easily than he, altho I have studied much more. 3. Had you gone at once, you might have seen them. 4. She was looking at herself in the mirror when I came in. 5. Tell me whose son he is. 6. I don't know where she has gone. 7. Do you think you are right? 8. They left for Italy a week ago. 9. How much did you pay for that hat? 10. What is the matter with his hand? 11. The young ladies we bowed to, were the ones you have already met. 12. I wish you would give it to her. 13. Here it is ; look at it before you leave.

IV. Write a short composition of about one hundred words on one of the following subjects :

(a) *Ce qu'on voit dans une salle de classe.*

(b) *Une promenade dans une grande ville.*

### THIRD YEAR FRENCH

Part I (one hour)

Oral Examination

Part II (two hours)

I. *Translate :*

(a) For seven years Charlemagne has fought in Spain, reducing the whole country except the city of Saragossa, whose king Marsile sends an embassy to treat of peace.

Among the advisers of Charlemagne two parties are at variance, the one led by Charlemagne's noble nephew Roland who wishes to fight, the other by Roland's stepfather, the traitor Ganelon, who hates him. When the French army starts for home, Roland is placed in command of the rear-guard, and about him gather all the noblest leaders of the army. But, as they are going through the defiles of the Pyrenees, they are attacked by a numberless host of Saracens. The army is massacred: four of the French are left, then Roland and Turpin alone; and finally Roland, after valiant efforts to summon help with his horn and to break his noble sword Durendal to prevent it falling into the hands of the enemy, dies on the battlefield strewn with the bodies of the twenty thousand dead. Charlemagne hears the call for help but arrives too late to save his nephew.

(b) 1. I waited till he came. 2. Although he might have done it, I do not think he is guilty this time. 3. Do not go away. I wish to show you some new books which have just arrived in the library. 4. He is the only person who reads Russian easily. 5. You can't trust him for he will certainly deceive you.

## II. *Translate:*

Une nation est une âme, un principe spirituel. Deux choses, qui, à vrai dire, n'en font qu'une, constituent cette âme, ce principe spirituel. L'une est dans le passé, l'autre dans le présent. L'une est la possession en commun d'un riche legs de souvenirs; l'autre est le consentement actuel, le désir de vivre ensemble; la volonté de continuer à faire valoir l'héritage qu'on a reçu indivis. L'homme ne s'improvise pas. La nation comme l'individu est l'aboutissant d'un long passé d'efforts, de sacrifices et de dévouements. Le culte des ancêtres est de tous le plus légitime; les ancêtres nous ont faits ce que nous sommes. Un passé héroïque, des grands hommes, de la gloire (j'entends de la véritable), voilà le capital social sur lequel on assied une idée nationale. Avoir des gloires communes dans le passé, une volonté commune dans le présent; avoir fait de

grandes choses ensemble, vouloir en faire encore, voilà les conditions essentielles pour être un peuple. On aime, en proportion des sacrifices qu'on a consentis, des maux qu'on a soufferts. On aime la maison qu'on a bâtie et qu'on transmet. Le chant spartiate " Nous sommes ce que vous fûtes, nous serons ce que vous êtes " est dans sa simplicité l'hymne abrégé de toute patrie.

Dans le passé, un héritage de gloire et de regrets à partager ; dans l'avenir, un même programme à réaliser ; avoir souffert, joui, espéré ensemble, voilà ce qui vaut mieux que des douanes communes et des frontières conformes aux idées stratégiques ; voilà ce que l'on comprend malgré les diversités de race et de langue. Je disais tout à l'heure " avoir souffert ensemble " ; la souffrance en commun unit plus que la joie. En fait de souvenirs nationaux, les deuils valent mieux que les triomphes, car ils imposent des devoirs ; ils commandent l'effort en commun.

E. RENAN, *Discours et Conférences*.

III. Give the principal parts of : *peindre, acquérir, retenir, écrire, s'asseoir, mouvoir, croître*.

IV. Write a short composition of about a hundred and fifty words on one of the following subjects :

- (a) *Un voyage en chemin de fer.*
- (b) *La France et les Etats Unis.*

## FIRST YEAR SPANISH

I. Dictation.

II. (a) Give a list of all the possessive adjectives.

(b) Count by tens from 9 to 99, writing out the numbers.

(c) Give the plural of *feliz, difícil, pie, página, acción*.

III. Conjugate the following :

(a) Present indicative of *empezar, tener, escribir*.

(b) Imperfect indicative of *ir, mandar*.

(c) Future indicative of *haber*.

- (d) Preterite indicative of *llegar, comer, saber*.
- (e) Conditional of *salir*.
- (f) Present subjunctive of *sentir, levantarse, traer*.
- (g) Past subjunctive of *andar, leer*.
- (h) Synopsis (1st sing. of all simple tenses) of *dar, estar, hacer, poner, morir*.

#### IV. Translate :

1. I don't know what time it is.
2. What is the largest city in Spain?
3. I am sorry that you cannot go with us tonight.
4. Where does your friend live?
5. The boy with whom you were talking has been studying Spanish for more than a year.
6. They did not expect to return until tomorrow.
7. Who has my book?—I have it.—Give it to me at once.
8. I should like to see her.
9. We were so hungry that we could not wait for you.
10. The train has just left the station.
11. Please sit down a minute.—Thank you, I must look for my brother, who was to be here at half past seven.
12. I reached Buenos Aires on the 12th of May.
13. He wants me to show it to him.
14. She told her so a week ago.
15. This isn't my pen and it isn't John's; it's yours.

#### V. Translate :

Había pasado más de una hora cuando sintió ruido de pasos. Un hombre subía la escalera, Daniel le reconoció al instante.

¡Caifás!—gritó levantándose.

—Sr. Morton, dijo Mundideo con asombro.

Vivísimo gozo se pintaba en el semblante del forastero. Tomó a Caifás del brazo y le dijo con acento conmovido: "Tú también me conoces; pero tú no me rechazas."

—Parece que no ha podido usted encontrar alojamiento.

—Y tú me ofreces el tuyo. ¡Cuánto me alegro de encontrarte! Eres una aparición divina. Me hieló de frío.



Tengo mi equipaje en el Ayuntamiento y no quieren dármelo hasta mañana. Mi criado está preso.

—Ya lo sé . . . ¡Que un caballero tan poderoso pase la noche en la calle . . . !

—En dónde está su casa ?

—Aquí, muy cerca—repuso Caifás.—¿ Pero qué es eso que brilla en el suelo? Parecen tres monedas de cinco duros.

—Es dinero que se me cayó—repuso Daniel.—Puedes tomarlo.

PÉREZ GALDÓS.

## SECOND YEAR SPANISH

I. Dictation and oral work.

II. (a) When do you use the ordinal numerals?

(b) Give a list of all the neuter pronouns.

(c) What are the principle uses of the subjunctive?

Illustrate by examples.

(d) Write sentences showing some of the idiomatic uses of the verbs *hacer* and *poner*.

III. (a) Give a list of all the irregular present subjunctives which end in *—ga*.

(b) What are the peculiarities of the conjugation of radical-changing verbs of the second class? Name the principal verbs in this class.

(c) Give a synopsis (1st sing. of all simple tenses) of *caer*, *reír*, *venir*, *traducir*, *querer*.

IV. *Translate :*

Hello, John ! What have you been doing this week?—Nothing. I've been sick.—Is that so? I'm sorry to hear that. What's the matter?—I don't know exactly. The doctor says he thinks I caught cold. But I feel better now and I'm going away tomorrow.—Where are you going?—Father and I are going to Havana.—When does the steamer leave?—At eleven o'clock in the morning.—

Good ; perhaps I can come to say good-bye to you.—You're very kind, but I don't want you to bother, if you have anything else to do.—No, I'm not very busy now ; besides I'd like to see the steamer, because I hope to go to Cuba myself some day.—They say it's a very interesting country.—Yes, my brother has been working there for several years and he likes it very much. He's coming home this summer.—We may see him.—If you go to Matanzas, I'd like to have you look him up. I'll give you a card of introduction. Here it is. Give him my best, if you find him.—I'll be glad to. Is he older than you?—Yes, he's twenty-seven. How long are you going to stay in Havana?—Only a couple of weeks. As soon as my father has settled some business matters, we are coming back.—Well, I hope you have a very pleasant trip.—Thank you. I'll see you when I get back and tell you all about it.—Good luck.—Same to you. Good-bye.

*V. Translate :*

Pasaron al comedor, donde ya aguardaba la señora, y marido y mujer se sentaron a la mesa uno frente a otro, mientras el sobrino se acomodó no lejos de ellos en una silla. Pero una cosa le dejó estupefacto inmediatamente, y fué el ver al lado del plato de su tío, además del cubierto, un grande y magnífico revólver de seis tiros. Y su estupor creció al ver que el tío Manolo lo separaba suavemente un poquito como si se tratase del vaso, el tenedor o cualquier otro de los enseres indispensables de la mesa ; y todavía más al observar que su tía no hacía alto en ello y comenzaba tranquilamente a comer sus huevos cocidos como si fuese la cosa más natural del mundo. La imaginación de nuestro héroe comenzó a dar más vueltas que una rueda, perdiéndose en un piélago de conjeturas ; mas nunca se atrevió a preguntar lo que aquello significaba, por más que la curiosidad le picase cruelmente, pues entendía sobradamente que cualquier pregunta sería indiscreta. No por eso se crea que renunció a saberlo ; pero lo aplazó para mejor sazón.

PALACIO VALDÉS.



## THIRD YEAR SPANISH

I. Dictation and oral work.

II. Escribese una carta a un amigo, en la cual se le da cuenta de cómo usted ha pasado el verano.

III. Dése un resumen (por lo menos 100 palabras) de alguna novela o comedia española.

IV. Escribese un diálogo entre el señor A y la señorita B. La escena es la sala de la señorita B, donde recibe una visita del señor A.

V. *Tradúzcase al español :*

That evening, at about half-past seven o'clock, dinner being over and Mr. and Mrs. Baxter (parents of William) seated in the library, Mrs. Baxter said :

" I think it's about time for you to go and dress for your Club meeting, papa, if you intend to go."

" Do I have to dress?" Mr. Baxter asked plaintively.

" I think nearly all the men do, don't they?" she insisted.

Mr. Baxter rose submissively and went up stairs to do as he was bid. But after fifteen or twenty minutes, during which his footsteps had been audible in various parts of the house, he called down :

" I can't find 'em."

" Can't find what?"

" My evening clothes. They aren't anywhere in the house."

" Where did you put them the last time you wore them?" she called.

" I don't know. I haven't had 'em on since last spring."

" All right ; I'll come," she said, rising. " Men never can find anything."

BOOTH TARKINGTON.

VI. *Tradúzcase al inglés :*

En una mañana fría y húmeda llegué por primera vez al inmenso país de los estados Unidos. Iba el "steamer" despacio, y la sirena aullaba roncamente por temor de un

choque. Quedaba atrás Fire Island con su erecto faro; estábamos frente a Sandy Hook, de donde nos salió al paso el barco de sanidad. El ladrante slang yanqui sonaba por todas partes, bajo el pabellón de bandas y estrellas. El viento frío, el humo de las chimeneas, el movimiento de las máquinas, las mismas ondas ventrudas de aquel mar estañado, el vapor que caminaba rumbo a la gran bahía, todo decía: "all right." Entre las brumas se divisaban islas y barcos. Long Island desarrollaba la inmensa cinta de sus costas, y Staten Island, como en el marco de una viñeta, se presentaba en su hermosura, tentando al lápiz, ya que no, por falta de sol, la máquina fotográfica. Sobre cubierta se agrupan los pasajeros: el comerciante de gruesa panza, congestionado como un pavo, con encorvadas narices israelitas; el clergyman huesoso, enfundado en su largo levitón negro, cubierto con su ancho sombrero de fieltro, y en la mano una pequeña Biblia; la muchacha que usa gorra de jokey y que durante toda la travesía ha cantado con voz fonográfica, al son de un banjo; el joven robusto, lampiño como un bebé, y que, aficionado al box, tiene puños de tal modo que bien pudiera desquijarar un rinoceronte de un solo impulso.

RUBÉN DARÍO.

### ANCIENT HISTORY

1. Where have you studied this subject?
2. How long have you studied it?
3. What text-book or text-books did you use?
4. What else have you read on the subject?

If you are trying for only a half-unit of credit, answer question I and any *four* questions in Greek History or any *four* questions in Roman History.

#### I. *Geography.*

Locate on the outline map five of the following: Troy, Syracuse, Memphis, Armenia, Thermopylae, Samnium,

Philippi, Cyprus, Alexandria, Constantinople, Dacia, the Roman province of Asia, Corinth, Macedonia.

II. *Oriental History.*

Tell what you can about two of the following : Hammurapi, the Egyptian Empire, the Phoenicians, Nebuchadnezzar.

III. *Greek History.* (Answer one question.)

1. What have recent discoveries taught us about early Aegean civilization (prior to 1000 B. C.)?
2. Outline the story of one of the Homeric poems.
3. What part did Miletus play in commerce and colonization, in the history of science, and in the Persian Wars?

IV. *Greek History.* (Answer two questions.)

1. Tell what you can about the characteristics and the work of two of the following : Themistocles, Socrates, Alcibiades, Epaminondas.
2. Describe carefully the Athenian Acropolis at the time of the Peloponnesian War.
3. What did Philip of Macedon accomplish?
4. What principles did Alexander adopt for the government of his empire? What was the permanent result of his conquests? What were the principal kingdoms found by his successors?

V. *Roman History.* (Answer two questions.)

1. What were the functions of the consuls, the censors, the tribunes, the praetors, and the senate in the Roman republic?
2. What were the causes and the results of the war with Pyrrhus, the Second Punic War, and the wars with Mithridates?
3. Give an account of Caesar's conquest of Gaul and explain its significance.

VI. *Roman History.* (Answer three questions.)

1. Give a sketch of the life and achievements of Cicero.
2. What countries were included in the Roman Empire at the time of Augustus? What other countries were annexed by his successors?
3. Tell what you can about two of the following emperors: Claudius, Vespasian, Marcus Aurelius, Diocletian.
4. What can you say about the relations between Rome and the Germans (a) in the days of Marius, (b) during the administration of Augustus, (c) in the fifth century after Christ?

## MEDIEVAL AND MODERN HISTORY

1. Where have you studied this subject?
2. How long?
3. With what text-book or text-books?
4. What else have you read on the subject?

If you are trying for only a half-unit of credit divide the paper after question 7.

*Group I*

(Answer any *two* questions.)

1. Tell what you can of St. Louis, Omar, Gerbert, Boccaccio.
2. Whence came the Normans? How did they gain a foothold, and what lands did they come to occupy in France? In the British Isles? In Italy?
3. How did the civilization of Islam differ from that of Latin Christendom in the twelfth and thirteenth centuries? Through what channels and how did either influence the other?

*Group II*

(Answer *two* questions.)

4. What was "the partition of Verdun"?—the "Hanse-



atic League" ?—the " Sicilian Vespers " ?—the " Babylonish Captivity " of the Popes ?

5. Narrate the origin and describe the nature and development of the " Holy Roman Empire."

6. Tell the story of the " Hundred Years War."

### *Group III*

(Answer *both* questions unless you are trying for only a half-unit of credit.)

7. Draw on the map, in their proper place, the boundaries of Latin Christendom at the close of the Middle Ages. Insert the names of its leading states.

8. On the outline map locate the following : Seine, Tiber, Rhone, Elbe, Rhine, Scheldt, Danube ; Berlin, Brussels, Antwerp, Liège, Namur, Calais, Verdun, Paris, Bordeaux, Marseilles, Milan, Turin, Vienna, Belgrad, Trieste, Danzig.

### *Group IV*

(Answer *two* questions.)

9. What were the important issues of the Spanish Succession war ? Give the date and the terms of the Peace of Utrecht.

10. What points of resemblance do you see between the present war and the Napoleonic wars ? What important differences ? What terms were imposed on France by the second Treaty of Paris in 1815 ?

11. Can you give any examples of discussion of, or proposals for, perpetual peace or the federation of Europe in the eighteenth century or during the Napoleonic wars ? What practical efforts were made by the great Powers of Europe to preserve the peace of Europe after the Napoleonic wars ?

### *Group V*

(Answer *two* questions.)

12. Write a brief account of one of the following, giving important dates. (a) The Unification of Italy. (b) The Unification of Germany.

13. The Reichstag, or lower chamber of the legislative assembly of the German Empire, is elected on the basis of universal manhood suffrage ; yet it is often asserted that the Empire is governed autocratically by the Emperor. Is the second statement true ? If so, to what extent is it true, and how can it be true at all consistently with the first statement ?

14. What do you understand to be the fundamental theories of Socialism ? What is the numerical strength of the Socialist organizations in France and in Germany ? From what classes of people and in what numbers did the Social-Democrat Party in Germany obtain votes outside the organization just before the war ? Do the Socialists exert a greater influence in France than in Germany ? If so, why ?

## AMERICAN HISTORY AND CIVICS

Are you seeking a unit or a half unit of credit ? Where have you studied the subjects, how many weeks, how many hours a week, what text-books ?

### *Part I. American History.*

Group 1. Write on two questions taking 1 or 2 and 3 or 4.

1. Describe the circumstances, social, religious, economic and political from which two principal groups of colonists came to America.

2. Show how these circumstances in the old world affected the life and the institutions of these groups in the new. Give this in some detail.

3. What were the more significant Indian wars in which the British colonists were engaged between 1620 and 1775 ? Discuss one of them more fully, as to causes and results.

4. Give a sketch of the efforts to find a northwest passage to the Orient, with the names of those who took part in the quest and the effect upon American history through promotion of settlement and knowledge of geography.



Group 2. Write on one question.

1. Name three or more British generals distinguished for their work in the American colonies (excluding Canada) before 1770. State specifically the work of two of them.

2. Mention three or more colonial governors, before 1775, stating the colony each governed and when, the kind of colony, and the powers of these governors. What policy or incident makes each of the three memorable?

3. Mention two or more British statesmen whose policies were important for the American colonies, before 1770, and state exactly in what respect this was true.

Group 3. Write on two questions.

1. What was the darkest year of the Revolution for the Colonists? Give a sketch of the circumstances and conditions that mark that year.

2. Mention the various kinds of aid given the United States by France during the Revolution. Show how the relations between Great Britain and France 1756-1783, determined the policy of France in respect to the American Revolution. Did any other country assist the United States? How? Why?

3. How, at the end of the Revolution, did the United States acquire the region between the Alleghany Mountains and the Mississippi? What was the attitude of France toward the American claims in that quarter? What part, if any, did George Rogers Clark play in this matter?

Group 4. Write on one question.

1. Select one President between 1800 and 1820, and tell the circumstances of his election. What party did he represent? In what states did his political strength lie? What opposition developed during his administration? What were the most significant policies during his administration?

2. Contrast the problems and policies of our government before 1815 with those after 1815, in such a way as to

show that the War of 1812 was really a Second War of Independence.

3. What were the characteristics of the Jacksonian Period, 1820-1850? Illustrate by social changes, political changes, changes in the character and method of government state and federal, and by anything else that illustrates the spirit of the period.

### *Part II. Civics.*

Write on two or more questions.

1. What are the essential features of a popular government? Show to what extent the leading nations, including the United States, have worked these out. What remains to be done in any case?

2. State the powers given the President by the Constitution of the United States. What other powers does he exercise through his party leadership, through personal influence, and through the prestige of his office? Give illustrations from recent years.

3. How has the recent spread of prohibition been effected? What have the States done and how? What has the federal government done? How does this recent legislation differ from earlier legislation designed to effect prohibition?

4. What new agencies of government have been called into existence for the purpose of the war? What new taxes have been levied?

## ENGLISH HISTORY

Group I—*Answer three questions :*

1. What influence did the Roman occupation of Britain have on English history? When and why were the Roman legions withdrawn from Britain?

2. Describe the life and work of Alfred the Great. Give dates.

3. Give an account of the Norman Conquest, including (a) William's claims to the throne, (b) the changes he made in the government of England, and (c) the importance of the Conquest in English history.

4. Give the causes of the Hundred Years War, and the chief events to the Treaty of Bretigny. Give dates.

5. Explain five of the following : Danegeld, scutage, knight's fee, interdict, Domesday Book, villein, homage.

Group II—*Answer two questions :*

1. Describe (a) the Spanish armada, (b) the trial of the seven bishops, (c) the revolution of 1688, and show the importance of each in English history.

2. Give an account of the life, character and death of Sir Thomas More. Name a book he wrote and indicate the nature of its contents.

3. Give a short account of the public life and work of Gladstone.

4. Explain five of the following : rump parliament, star chamber, Cabal, South Sea Bubble, prime minister, parliamentary reform act of 1832.

## ELEMENTARY ALGEBRA

1. Simplify

$$\frac{a-4}{a^2-9a+20} + \frac{a-5}{a^2-11a} + \frac{a-3}{a^2-7a+12}.$$

2. Simplify

$$[\sqrt{3} \div 3^{R\frac{1}{3}}]^{12}; \quad [16]^{\frac{1}{3}} \cdot [16]^{\frac{1}{3}}$$

3. Factor into simplest factors with real coefficients,

$$x^2 + x + y - y^2; \quad x^{12} - 1.$$

4. Solve

$$\begin{aligned} 2x - 3y + 4z - 5t &= 0 \\ x + 2y - 3z + t &= -8 \\ -x + 2y + 3z + t &= 8 \\ 3x - 2y + 4z - 3t &= 7. \end{aligned}$$

5. There are two numbers such that the product of the first and 1 more than the second is 660; and the product of the second and 1 less than the first is 609. Find the numbers.

6. A 7 per cent mixture of salt and water has 7 pounds of salt in 100 pounds of mixture. How many pounds of water must be added to 80 pounds of a 10 per cent mixture of salt and water to produce a 7 per cent mixture?

### INTERMEDIATE ALGEBRA

1. Find in a simple form the value of  $at^2 + 2bt + c$  when

$$t = \frac{-c}{-b + \sqrt{b^2 - ac}}.$$

2. Simplify

$$[\sqrt{3} \cdot 3^{-\frac{1}{2}}]^{12}; \quad (16)^{2.28} \div (16)^{1.03}.$$

3. After a mowing machine has made the circuit of a 10 acre rectangular field 33 times, cutting a swath 5 feet wide each time,  $2\frac{1}{2}$  acres of grain remain standing. Find the dimensions of the field.

4. Solve simultaneously

$$x^2 + y^2 = 10, \quad x^2 + 4xy - 2y^2 = 19.$$

5. For what values of  $a$  are the simultaneous solutions of  $y = 2x + a$  and  $x^2 + y^2 - 2ax - 2y - 10 = 0$  not real?

6. If  $a : b :: c : d$  prove that

$$\frac{\sqrt{4a^2 + 9c^2}}{2a + 3c} = \frac{\sqrt{4b^2 + 9d^2}}{2b + 3d}$$



## ADVANCED ALGEBRA

1. Find correct to two places of decimals a root of  

$$x^3 + 4x - 7 = 0.$$
2. Draw the graph of  $y = \frac{x^2 - 3x + 5}{x^2 + 2x + 2}$ . From this graph estimate the greatest value of  $y$ . By some other method find this value exactly.
3. The equation  $6x^4 + 7x^3 - 22x^2 - 7x - 6 = 0$  has two rational roots. Find exact values for all its roots.
4. By using the binomial theorem find  $(1.001)^{50}$  correct to 6 places of decimals.
5. In a party of workmen there are four white men, three Indians and two negroes. The Indians will not work with any white men, and *two* of the white men will not work together and will not work with the negroes. In how many ways can three men be chosen from the party to do a piece of work?
6. Solve
 
$$\begin{aligned} x + 5y - 8z &= -12 \\ ax + 2y - 3z &= -4 \\ x - ay + 2z &= 4. \end{aligned}$$

Define dependent linear equations. For what value of  $a$  are the above equations dependent?

## PLANE GEOMETRY

1. Construct a right triangle, given the hypotenuse and the altitude upon the hypotenuse. Prove your construction correct.
2.  $ABCD$  is a rectangle having  $A$  and  $C$  opposite vertices. If  $P$  is any point in the plane of the rectangle, show that
 
$$\overline{PA}^2 + \overline{PC}^2 = \overline{PB}^2 + \overline{PD}^2$$

3. Prove that the line which joins the midpoints of the legs of a trapezoid is parallel to the bases and equal to one-half their sum.

4. Three equal circles touch each other externally. Find the area included between them, if the radius of each is 2 feet.

5.  $ABC$  is a right angled triangle having  $AC = 15$  ft.,  $BC = 20$  ft., and  $AB = 25$  ft. From the right angle a line is drawn perpendicular to the hypotenuse. Find the length of this line, and the segments into which it divides the hypotenuse.

6. The base  $AB$  of a triangle is given in length and position. The opposite angle is given in magnitude only. Find the locus of the third vertex, and prove your result correct.

### SOLID GEOMETRY

1. Find the locus of a point equidistant from the three faces of a trihedral angle. Prove.

2. The volume of a triangular pyramid is equal to one-third the product of the area of its base and its altitude. Prove.

3. If the radius of a sphere is 4 feet and a certain equilateral spherical triangle on this sphere has an area of three square feet, find the angles of this triangle.

4. The radii of two spheres are 5 inches and 12 inches respectively. The distance between their centers is 13 inches. Find the area of the circle of intersection of the two spheres and also the area of that part of the surface of the small sphere which is outside the large sphere.

5. If two intersecting lines are each parallel to a given

plane, the plane of these lines is parallel to the given plane. Prove.

6. If the total surface of a regular tetrahedron is 100 square inches, find the volume of the tetrahedron.

### PLANE TRIGONOMETRY

1. Find *all* values of  $x$  greater than  $49^\circ$  and less than  $297^\circ$  for which

$$\sin^2 x \cos x - \sin x \cos^2 x = 0.$$

2. If  $\tan 2A = -\frac{24}{7}$ , find  $\sin A$  and  $\cos A$ .

3. Show that  $\sin 3A = 3 \sin A - 4 \sin^3 A$ .

4. If the sides of a triangle are 10, 12, and 14 feet, respectively, find the angles.

5. If  $\tan^{-1}(-2)$  is in the second quadrant, find the value of the sine and of the cosine of twice this angle.

6. A regular polygon of seventeen sides is inscribed in a circle whose radius is 20 feet. Find the total area of the seventeen spaces outside the polygon and inside the circle.

### PHYSICS

#### Group A

Answer two questions from this group.

1. What is meant by specific gravity? Explain fully one method of determining the specific gravity of a liquid. Show how the specific gravity is determined from the observed data.

2. What is meant by the moment of a force? A uniform bar 6 ft. long and weighing 9 pounds is suspended at a point 2 ft. from one end. Using the principle of moments find the point at which a 6 lb. weight should be hung on the bar in order to keep the bar horizontal.

3. What is meant by efficiency of a machine, mechanical advantage, uniformly accelerated motion, work, power?

### Group B

Answer three questions from this group.

4. What is meant by the dew point? How may the dew point be determined in any given room? Why does dew appear on the grass more often than on the stones?

5. Given three beakers each containing 100 grams of water at  $50^{\circ}\text{C}$ . Into the first is put 50 grams of water at  $0^{\circ}\text{C}$ ., into the second 50 grams of ice at  $0^{\circ}\text{C}$ ., and into the third 50 grams of copper at  $0^{\circ}\text{C}$ . In which one will the resulting temperature be the highest? The lowest? Explain each answer.

6. Two sounds differ in (a) pitch, (b) loudness, (c) quality. How do the corresponding waves differ in each case? What is meant by resonance? Illustrate your answer by reference to some case of resonance in sound.

7. Make diagrams to show (1) the path of a ray of light thru a plate of glass with parallel faces, when the angle of incidence is about  $45^{\circ}$ , (2) the path of light thru a prism when a beam of white light is incident upon one face at an angle of about  $45^{\circ}$ . Tell briefly how you would determine the candle power of a given light source.

### Group C

Answer two questions from this group.

8. A steel bar is suspended in a horizontal position and the north pole of a magnet is brought near one end of the



bar and the bar moves toward the magnet. Does this show that the bar was originally magnetized? Explain. What is meant by the angle of declination? Angle of dip?

9. What is the essential difference in construction between an ammeter and a voltmeter? Draw an electric circuit including at least one lamp and other necessary parts. Indicate how an ammeter should be connected in the circuit to measure the current thru the lamp and a voltmeter to measure the potential difference between the terminals of the lamp. Show how you would use the readings of these instruments to determine the resistance of the lamp.

10. Show by diagram the essential parts of an electric bell and explain fully how it operates. State the purpose of each part.

## CHEMISTRY

(Entrance credit in chemistry does not carry with it University credit in any course in chemistry in Cornell University. Applicants for University credit in Introductory Inorganic Chemistry, Course 1, who have received permission from Mr. Hoy, should take the examination for University credit also being held in this room.)

Answer eight questions only.

(Atomic Weights :  $H=1$ ,  $O=16$ ,  $Na=23$ ,  $S=32$ ,  $Cl=35.5$ ,  
 $K=39$ ,  $Cu=63.6$ )

1. Complete and balance each of the equations indicated below, using symbols or formulas throughout :

- (a) ammonium nitrate (heated) =
- (b) potassium chlorate + manganese dioxide (heated) =
- (c) calcium hydroxide + carbon dioxide =
- (d) sodium hydroxide (hot, concentrated) + chlorine =
- (e) sodium carbonate + hydrochloric acid =
- (f) ferrous sulphide + sulphuric acid =
- (g) potassium iodide + bromine =
- (h) silicon dioxide + carbon (heated in electric furnace) =
- (i) phosphorus pentoxide + water =
- (j) nitrogen pentoxide + water =

2. How would you distinguish, by chemical means, between (a) nitrogen gas and carbon dioxide gas, (b) hydrogen gas and carbon monoxide gas, (c) a diamond and a piece of glass, (d) pieces of iron wire and platinum wire, (e) common salt and sodium bromide?

3. Define in your own words, and illustrate any ten of the following terms: (a) Element, (b) Oxide, (c) Metal, (d) Hydrolysis, (e) Exothermic Reaction, (f) Solute, (g) Supersaturated Solution, (h) Atomic Weight, (i) Dibasic acid, (j) Radical, (k) Alkali, (l) Basic Salt.

4. Describe (with sketch) an experiment by means of which you demonstrate that

- (a) ammonia is very soluble in water,
- (b) chlorine gas is a supporter of combustion,
- (c) ozone may be prepared from oxygen,
- (d) the "zone of unburned gases" of the ordinary flame is comparatively cool,
- (e) the smoke of ordinary black gunpowder contains potassium sulphide.

(Choose any four parts of this question.)

5. (a) Describe the method that you used in the laboratory for the preparation of hydrogen gas. What precautions were used in this work?

(b) Give three methods for the preparation of hydrogen, any one of which would, in your opinion, be of practical value in the manufacture of this gas on a large scale for military purposes.

(c) What volume of hydrogen gas, measured under standard conditions, would be required for the complete reduction of 398 grams of cupric oxide?

6. How would you proceed to prepare

- (a) Quicklime from limestone?
- (b) Calcium carbide from quicklime?
- (c) Acetylene from calcium carbide?
- (d) Potassium nitrate from sodium nitrate?
- (e) Nitric acid from sodium nitrate?
- (f) Sulphuric acid from sulphur dioxide?

(Choose any five parts of this question.)

7. State Avogadro's Hypothesis.

What volume of oxygen gas would be required for the complete combustion of (a) 25 liters of methane, (b) 100 cubic meters of carbon monoxide, (c) 10 cubic feet of acetylene, (d) 5 cubic centimeters of ethane,  $C_2H_6$ ?

8. (a) What volume of a solution of hydrochloric acid containing 73 grams of the acid per liter would exactly suffice for the neutralization of the sodium hydroxide obtained by the action of 0.46 gram of metallic sodium upon water?

(b) What weight of potassium hydroxide would be necessary for the neutralization of 25 cc. of a solution of sulphuric acid containing 49 grams of the acid per liter?

9. Describe briefly commercial methods for the preparation of any five of the following products: (a) glass, (b) coke, (c) sulphuric acid, (d) smokeless powder, (e) caustic soda, (f) graphite, (g) coal gas, (h) chlorine.

## BOTANY

1. Give a brief account of the life-history of a fern.

2. Describe and compare the features of a monocotyledonous and a dicotyledonous seed. Illustrate by sketches, and name all parts.

3. Give the general characters of the groups: thallophytes, bryophytes, pteridophytes, and spermatophytes, giving an example of each.

4. Compare a stem and a root as to 1st, structure, 2nd, function.

5. Select and name five flowering plants representing different families. Arrange them in a series according to the degree of their complexity.

6. Discuss in detail some important physiological process in a plant and describe an experiment to demonstrate the working of the process.

7. Describe the stages in the life history of a representative alga and of a representative fungus.

8. Give three special modifications possessed by the plants of a desert.

9. Give the life-history of a moss. Draw a diagram and name parts shown.

10. Discuss trees and shrubs with particular reference to their relation to the seasons.

## ZOOLOGY

For 1 unit answer questions 1-5 and any three of the others.

For half unit answer any five questions.

1. Define each of the following terms : molt, cell division, nucleus, metamorphosis, larva, excretions, spiracle, fauna, cilia.

2. Explain fully the principle of respiration in animals. Compare this process in ameba, an insect, a fish, and a frog,

3. Make a diagram of a Hydra and name its parts. Compare its habits and activities with those of ameba. What is the difference between the two as regards the structure of the body?

4. Give the functions of the following and name an animal in which each is found : flagellum, pseudopodium, mandible, siphon, tentacle, plastron, mantle.

5. Explain the mode of swimming of a fish and a muskrat. Account for the difference.

6. What are the properties of living protoplasm? Explain by application to the activities of some simple animal.

7. Describe the process of metamorphosis in some animal which you have studied.



8. Describe a method of demonstrating the circulation of the blood in the living animal and write the impressions of your observation.

9. Compare the breathing, locomotion, and food getting of the tadpole with those of the adult.

10. State how a mammal differs from a frog in (a) mode of development, (b) external structure.

## BIOLOGY

State briefly what biological subjects you have studied, with what proportion of recitation and laboratory work and for what periods. Any laboratory books or other work done in such courses may be submitted as supplemental to the answers to be written to the following questions.

Answer ten questions, including two from each group.

### Group 1

1. Where does a plant get its carbon food? Explain the process of photosynthetic assimilation. What is formed as a result of the process? What conditions are necessary?

2. What nutrients are contained in a piece of bread and butter. In what part of the alimentary canal and by what digestive fluid is each of these nutrients largely digested?

3. Describe the breathing of a crayfish or a fish. State what gases are exchanged in this process and explain the necessity for this exchange.

### Group 2

1. Describe and sketch the reproductive organs of the fern or liver wort. Describe the manner of fertilization.

2. Compare the red and white corpuscles of human blood as to size, shape, number and function.

3. Illustrate by diagrams the cellular structure of a hydra and illustrate and describe its mode of increase.

### Group 3

1. Define monocotyledon, family, genus, angiosperm. Describe and illustrate the structure of the flower and cluster of one of the compositae.

2. Compare (homologize) and name the bones of the arm and hand with those of leg and foot, in man.

3. Name, and give the differential characters of five classes of vertebrates.

### Group 4

1. What are the main ecological factors in plant life? What are hygrophytes, xerophytes and tropophytes?

2. Define protoplasm. Describe its distribution in the normal cell such as in *Spirogyra* and in corn. Discuss the movement of protoplasm in some plants.

3. Describe the proper method of dressing a wound made by a rusty nail and give reasons for using the method described.

### Group 5

1. Name 5 great biologists of the past, give approximate date of activity, nationality and field of work.

2. Name 5 mammals native of this country (two of which to be aquatic or semiaquatic.) Mention the food of each and state method of securing this food.

3. Name a fish and make a labeled drawing of a side view of it, indicating the position of the eye, gill cover and fins.

**PHYSICAL GEOGRAPHY**

N. B. Those desiring (1) unit of credit answer all questions.

Those desiring  $\frac{1}{2}$  unit of credit answer question 7 and any four of the others.

Answer these queries before beginning to write answers to subject matter questions :

Where did you study physical geography? How long, in weeks.

What texts did you use?

1. Account for the flow of the "Gulf Stream" ocean current and for its continuation as a shallow surface "Drift" across the Atlantic to the northwest coast of Europe.

2. (a) What volcano and where located has been in active eruption in the United States in the last few years? What one in Alaska?

(b) Why have the volcanoes Pele, Chimborazo and Fujiyama very steep cones, while all Hawaiian volcanoes have very broad gently sloping cones?

3. Give a number of reasons (label each one so that they can be readily distinguished in your answer) why so large a part of the world's population is situated on plains. Refer to origin of plains' soils, to transportation conditions, to industry, etc.

4. Distinguish between the following physiographic phenomena as to (a) origin, (b) form, (c) composition: Moraines, Eskers, Drumlins, Outwash Fans, Monadnocks.

5. (a) How are mesas formed?

(b) Can waves and ocean currents make large bays and inlets on what was a straight coast line? If so how? If not what is the effect of waves and currents on a coast line that is very irregular, has many bays, inlets, headlands, etc.?

6. (a) Distinguish between an Oceanic Climate and a Continental Climate.

(b) Account for the aridity of the northern part of the Sahara Desert on the basis of planetary winds and topography.

7. (a) Sketch a topographic map of a river valley with three tributaries, the main river valley and the lower parts of the tributaries having maturity of form while the upper parts of tributaries are in gorges.

(b) Define contour line, contour interval, horizontal scale.

8. (a) State as clearly as you can why mountains in the youthful stage exhibit such wild irregularity of topography both as to details and larger masses.

(b) On basis of above, answer account for the origin of (1) peaks (2) passes.

## BOOKKEEPING

( $\frac{1}{2}$  or 1 unit)

For  $\frac{1}{2}$  unit answer the first three questions, for 1 unit answer all.

1. The inventory of merchandise at the beginning of an accounting period was \$7,000 and at the close of the period \$8,500. During the period the purchases amounted to \$15,000 and the sales to \$16,000. Customers returned goods to the amount of \$500 and the proprietor took for personal use goods which cost \$300.

Prepare and close the ledger account or accounts affected by the above transactions.

2. a. On which side of the account is the balance in (1) Bills Payable and (2) Bills Receivable? What does the balance show in each case?



b. Which of the accounts, Bills Receivable or Bills Payable is affected and how in each of the following cases :

- (1) A sale of merchandise for a note.
- (2) The payment of a note given when merchandise was purchased by the business.
- (3) The payment of a note given to the business by one to whom merchandise was sold.
- (4) The purchase of merchandise for a note of the business.

3. What Journal entries if any would you make under the following conditions :

- (1) In posting from a correct Journal entry the debit was posted to A. J. Brown instead of J. G. Brown.
- (2) The Journal entry from which posting was made was incorrect. The amount debited should have been credited and the account credited should have been debited.
- (3) The Journal entry from which posting was made debited the wrong account but credited the right one.

4. Illustrate the use of the Cash Book by entering the following transactions and explaining the postings to be made to the ledger, assuming that the ledger is complete in itself.

Balance on hand \$500.

Jan. 4. Merchandise sold for cash \$400.

Jan. 8. Pay rent \$50.

Jan. 11. Pay J. G. White on account \$175.

Jan. 12. Receive from Browning & Co., in full \$620.

Jan. 16. Pay American Jobbing Co. \$460.

Jan. 17. Receive interest \$42.

5. Explain the imprest system of handling petty cash payments.

**AGRICULTURE**

(Answer the first five questions for  $\frac{1}{2}$  unit of credit.  
Answer all the questions for one unit of credit.)

1. Give a good ration for egg production, state how it is fed and give reasons for the method.

2. Outline a spray calendar for the apple under New York conditions and include the time of application, the spray mixture used and the pests controlled with each spraying.

3. Give the following information for each of the crops listed below : (a) Amount of seed sown per acre ; (b) An average yield per acre ; (c) Time of year when sown.

Wheat	Timothy
Corn	Oats
Potatoes	Barley
Clover	

4. Outline a good rotation for a general farm. State very briefly why you think this is a good rotation.

5. Make a list of all the items that enter into the cost of production of some farm product.

6. Give in detail the amount of each kind of feed it is necessary to give a dairy cow in 24 hours. The cow weighs 1000 pounds and yields in the twenty-four hours 30 pounds of milk testing 4% butterfat. Describe the by-products from corn, wheat, and barley that are used to feed animals.

7. State how you would test a sample of cream by the Babcock method.

8. Explain the cause for absorption by the soil and discuss the importance of such phenomena with examples.

9. What is soil acidity? How may it be corrected? Explain the advantages and disadvantages of one qualitative test for acidity.

10. Explain what to do with the following farm implements before storing them at the end of the season's work : plow, grain binder, grain drill.

## DRAWING

Two examinations are given, one in freehand drawing and one in mechanical drawing. Applicants may take either, or by special arrangement may take both. The examination will be given and judged on the assumption that those taking it have had approximately 150 actual hours of instruction and practice for each  $\frac{1}{2}$  credit point desired. One (1) point is the maximum credit allowed in the subject. Candidates taking the examination must present samples of their work, and a teacher's statement showing time and proficiency.

### FREEHAND DRAWING

For this examination the applicant is required to make a pencil sketch of an object or group of objects. The objects used may be geometrical blocks with straight and curved lines and curved surfaces, simple pieces of pottery, furniture, or models with simple lines and surfaces. The purpose of the examination is to test the ability of the applicant to draw accurately and sympathetically just what he sees. Shading may or may not be required.

### MECHANICAL DRAWING

Questions may call for instrumental drawing of geometric constructions, orthographic and isometric projection, oblique section and intersection of solids, surface developments, etc., and working drawings of machine details, as bolts, nuts, pulleys, gears, various simple castings, etc. Data for the problems in any given examination will be furnished in the form of descriptive text, sketches, or photographs with dimensions marked or stated.

## MANUAL TRAINING

Examinations will be offered in woodworking, forging, foundry work, and machine work. To satisfy the entrance requirement the applicant must have performed not less than 300 hours of actual work in the subjects in which the examination is taken. Candidates must present a teacher's statement of the time actually spent in the work and of the proficiency attained therein.



# SCHOLARSHIP EXAMINATION PAPERS

## ENGLISH

### Part I

1. Write a letter [*not more than two pages*] giving some details about your study preparatory to this examination. [*Sign your number, not your name.*]

2. Write a composition four or five pages in length on one of the following topics :

- a. A summer on a farm.
- b. My interest in stories of the West.
- c. Touchstone.
- d. The number seven.
- e. Adrift in a motor-boat.
- f. Superstitions among people I know.
- g. What I like in Goldsmith.
- h. Traitors in American history.
- i. The value of the addresses of Washington and Webster (or of Lincoln) in the study of American history.
- j. A trip by trolley.

### Part II

Select one of the following passages ; (a) state from what poem or play it is taken ; (b) explain each italicized word ; (c) scan two consecutive lines ; (d) make a list of the phrases.

1. *Bacchus*, that first from out the purple grape  
Crushed the sweet poison of misused wine,  
After the *Tuscan* mariners transformed,  
Coasting the *Tyrrhene* shore, as the winds *listed*,  
On *Circe's* island fell.
2. But, O *sad* Virgin ! that thy power  
Might raise *Musaeus* from his bower ;  
Or bid the soul of *Orpheus* sing  
Such notes as, warbled to the string,  
Drew *iron* tears down *Pluto's* cheek,  
And made Hell grant what love did seek.

3. But look you, Cassius,  
The angry spot doth glow on Caesar's brow,  
And all the rest look like a *chidden train* :  
Calpurnia's cheek is pale ; and *Cicero*  
Looks with such *ferret* and such fiery eyes.
4. The *weird* sisters, hand in hand,  
*Posters* of the sea and land,  
Thus do go about, about :  
Thrice to thine and thrice to mine,  
And thrice again, to make up nine.  
*Peace* ! the *charm's* wound up.
5. The great *brand*  
Made lightnings in the splendour of the moon,  
And flashing round and round, and whirl'd in an arch,  
*Shot* like a *streamer* of the northern morn,  
Seen where the moving *isles of winter* shock  
By night, with noises of the Northern sea.

### Part III

Write a comment or criticism on one of the following quotations :

1. Young man, there is America, which at this day serves for little more than to amuse you with stories of savage men and uncouth manners ; yet shall, before you taste of death, show itself equal to the whole of that commerce which now attracts the envy of the world.

—*Burke*.

2. The name of American, which belongs to you, in your national capacity, must always exalt the just pride of patriotism, more than any appellation derived from local discriminations.—*Washington*.

3. And, by the blessing of God, may that country itself become a vast and splendid Monument, not of oppression and terror, but of Wisdom, of Peace, and of Liberty, upon which the world may gaze, with admiration, forever !—*Webster*.

4. Let us have faith that right makes might, and in that faith let us to the end dare to do our duty as we understand it.—*Lincoln*.

### Part IV

Name some literary contemporaries of Carlyle and of Burns, or of Macaulay and of Johnson. Mention some noteworthy book by each writer you name.

## GREEK

## A.

## TRANSLATION INTO ENGLISH

The meeting between Cyrus the elder and Gobryas, as related by Xenophon :

ὁ δὲ Γωβρύας εἶπεν ὅτι Κῦρον πρῶτον βούλοιτο ἰδεῖν · καὶ οἱ ὑπηρεταὶ τοὺς μὲν ἄλλους ἱππέας αὐτοῦ κατέλιπον, τὸν δὲ Γωβρύαν ἄγουσι πρὸς τὸν Κῦρον. ὁ δ' ὡς εἶδε τὸν Κῦρον, ἔλεξεν ὧδε, ὦ δέσποτα, ἐγὼ εἰμι τὸ μὲν γένος Ἀσσύριος · ἔχω δὲ καὶ τεῖχος ἰσχυρὸν καὶ χώρας ἐπάρχῳ πολλῆς · καὶ ἵππον ἔχω εἰς χιλίαν, ἣν τῷ τῶν Ἀσσυρίων βασιλεῖ παρειχόμεν καὶ φίλος ἦν ἐκείνῳ ὡς μάλιστα · ἐπεὶ δὲ ἐκείνος τέθνηκεν ὑφ' ὑμῶν ἀνὴρ ἀγαθὸς ὢν, ὁ δὲ παῖς ἐκείνου τὴν ἀρχὴν ἔχει ἔχθιστος ὢν ἐμοί, ἤκω πρὸς σέ καὶ ἰκέτης προσπίπτω καὶ δίδωμί σοι ἐμαυτὸν δοῦλον καὶ σύμμαχον, σέ δὲ τιμωρὸν αἰτοῦμαι ἐμοὶ γενέσθαι · καὶ παῖδα οὕτως ὡς δυνατόν σε ποιοῦμαι · ἅπαις δ' εἰμι ἀρρένων παίδων. ὅς γάρ ἦν μοι μόνος καὶ καλὸς καὶ ἀγαθός, ὦ δέσποτα, καὶ ἐμὲ φιλῶν καὶ τιμῶν ὥσπερ ἂν εὐδαίμονα πατέρα παῖς τιμῶν τιθείη, τοῦτον ὁ νῦν βασιλεὺς οὗτος εἰς θήραν παρακαλέσας καὶ αἰχμὴν παρά τινος τῶν ἐπομένων ἀρπάσας, παίσας εἰς τὰ στέρνα τὸν μόνον μοι καὶ φίλον παῖδα ἀφείλετο τὴν ψυχὴν. ἐγὼ οὖν, εἰ μὲν ἔζη ἐκείνος, οὐκ ἂν ποτε ἦλθον πρὸς σέ · ἐπεὶ δ' εἰς τὸν τοῦ ἐμοῦ παιδὸς φονέα ἢ ἀρχὴν περιήκει, οὐκ ἂν ποτε τούτῳ ἐγὼ δυναίμην εὖνους γενέσθαι, οὐδὲ οὗτος ἐμὲ εὖ οἶδ' ὅτι φίλον ἂν ποτε ἡγήσαιοτο.

Ὁ μὲν οὕτως εἶπε · Κῦρος δ' ἀπεκρίνατο, Ἀλλ' ἦνπερ, ὦ Γωβρύα, καὶ φρονῶν φαίνῃ ὅσαπερ λέγεις πρὸς ἡμᾶς, δέχομαί τε ἰκέτην σε καὶ τιμωρήσειν σοι τοῦ παιδὸς σὺν θεοῖς ὑπισχνούμαι. λέξον δέ μοι, ἔφη, εἰάν σοι ταῦτα ποιῶμεν καὶ τὰ τεῖχη σε ἔχουν ἐῷμεν καὶ τὴν χώραν καὶ τὰ ὄπλα καὶ τὴν δύναμιν ἦνπερ πρόσθεν εἶχες, σὺ ἡμῖν τί ἀντὶ τούτων ὑπηρετήσεις ; ὁ δὲ εἶπε, Τὰ μὲν τεῖχη, ὅταν ἔλθῃς, οἶκόν σοι παρέξω · δασμὸν δὲ τῆς χώρας ὅνπερ ἔφερον ἐκείνῳ σοὶ ἀποίσω καὶ ὅποι ἂν στρατεύῃ, συστρατεύσομαι τὴν ἐκ τῆς χώρας δύναμιν ἔχων. οὕτω δὲ ὁ Κῦρος εἶπεν, Ἐπὶ τούτοις, ἔφη, ἐγὼ ἀληθευομένοις δίδωμί σοι τὴν ἐμὴν καὶ λαμβάνω τὴν σὴν δεξιάν · θεοὶ δ' ἡμῖν μάρτυρες ἔστων. ἐπεὶ δὲ ταῦτα ἐπράχθη, ἀπιέναι τε κελεύει τὸν Γωβρύαν ἔχοντα τὰ ὄπλα καὶ ἐπήρετο πόσῃ τις ὁδὸς ὡς αὐτὸν εἴη, ὡς ἤξων.

## B.

## TRANSLATION INTO GREEK

1. If Cyrus had not been slain, it is conceded by all that he would have become king. For the forces of Artaxerxes had been beaten and he himself, though older than Cyrus, was a cowardly man and less worthy (*ἀν-άξιος*) to rule.

2. On hearing that, he denied that he was going up against his brother that he might deprive him of his kingdom. For he thought that the Greeks would not accompany him further if he told the truth.

## C.

## QUESTIONS ON GREEK GRAMMAR

1. State the uses of *αὐτός*, and illustrate each of them by an example.

2. Write of the tense in which each form is found the first person singular in the indicative, subjunctive, and optative ; the infinitive, the participle of the following forms : *οἶδα*, *εἶδον* ; *καθίστημι*, *κατέστην* ; *ἀφίημι* ; *ἀπιών*.

3. When should *μή* be used with the indicative mood ? with the infinitive ? with the participle ?

4. Write the inflexion of *χείρ* in the singular ; of *πούς* in the plural.

5. Which is the correct form *τιμᾶν* or *τιμᾶν* (pres. infin.) ? Why ?

6. What difference in *form* is there between the future middle and the future passive ? Between the second aorist middle and second aorist passive ?



## GERMAN

## I.

*Translate :*

(a) Während der greise König sorgte und schuf, zog ein Jahr nach dem andern über sein sinnendes Haupt; stiller ward es um ihn, leerer und einsamer, kleiner der Kreis von Menschen, denen er sich öffnete. Die Flöte hatte er bei Seite gelegt, auch die neue französische Literatur erschien ihm schal und langweilig, zuweilen war ihm, als ob ein neues Leben unter ihm in Deutschland ergrüne, es blieb ihm fremd. Unermüdlich arbeitete er an seinem Heer, an dem Wohlstand seines Volkes, immer weniger galten ihm seine Werkzeuge, immer höher und leidenschaftlicher wurde das Gefühl für die große Pflicht seiner Krone. Aber wie man sein siebenjähriges Ringen im Kriege übermenschlich nennen darf, so war auch jetzt in seiner Arbeit etwas Ungeheures, was den Zeitgenossen zuweilen überirdisch und zuweilen unmenschlich erschien. Es war groß, aber es war auch furchtbar, daß ihm das Gedeihen des Ganzen in jedem Augenblick das Höchste war und das Behagen des Einzelnen so gar nichts. Als das Schicksal des Staates erschien er den Preußen, unberechenbar, unerbittlich, allwissend, das Größte wie das Kleine übersehend.

(b) Ihr wart noch zarte Knaben, aber schon  
 Entzweite euch der jammervolle Zwist,  
 Der ewig nie mehr wiederkehren möge,  
 Und häufte Gram auf eurer Eltern Herz.  
 Da wurde euerm Vater eines Tages  
 Ein seltsam wunderbarer Traum. Ihm deuchte,  
 Er sah' aus seinem hochzeitlichen Bette  
 Zwei Lorbeerbäume wachsen, ihr Gezweig  
 Dicht ineinander flechtend. Zwischen beiden  
 Wuchs eine Lilie empor. Sie ward  
 Zur Flamme, die, der Bäume dicht Gezweig  
 Und das Gebälk ergreifend, prasselnd aufschlug  
 Und, um sich wütend, schnell das ganze Haus  
 In ungeheurer Feuerflut verschlang.  
 Erschreckt von diesem seltsamen Gesichte  
 Befragt' der Vater einen sternkundigen  
 Arabier, der sein Orakel war,  
 An dem sein Herz mehr hing, als mir gefiel,  
 Um die Bedeutung. Der Arabier

Erklärte : wenn mein Schoß von einer Tochter  
 Entbunden würde, töten würde sie ihm  
 Die beiden Söhne, und sein ganzer Stamm  
 Durch sie vergehn.

## II.

1. Using as your model : *ich gehe, ich ging, ich bin gegangen, er geht : to go*, give the meaning, the principal parts and the third person singular present of : *verraten, ausbrechen, aufstehen, frühstücken, wissen, fortfahren, erkennen, wenden, entreissen, aussprechen*.

2. Form, in the past tense, one sentence with each of the following verbs, and translate your sentences into English : *schaffen, aushalten, sich unterhalten, lassen, verlassen, anbieten, bitten, beten, misslingen, unterbrechen*.

3. Give the nominative and genitive singular and the nominative plural with the definite article in each case of : *Herz, Gedanke, Staat, Volk, Drama, Irrtum, Gelehrte, Hirt, Hund, Hand*.

4. Use in complete sentences, in two different meanings, each of the following pronouns : *der, welcher, wer*. State what pronoun it is in each case.

5. Decline throughout the German equivalents for : *this good old gentleman ; your little sister*.

## III.

*Translate into German :*

1. Is Mr. Smith in? No, I am very sorry, he left his room five minutes ago. But will you not come in and sit down? He said he would be back in less than half an hour.

2. Did you know this gentleman? He certainly spoke very poor English. But, perhaps, he can't help that. He did not come to the United States until he was twenty-four years old. He is now studying here at the University, as you know. He intends to stay for two years and then to go back to Europe. He is said to be a wealthy man.

## IV.

Tell in German, in about 125-150 words, the contents of any German drama.

## FRENCH

I. *Translate :*

Partout où l'on parle anglais, personne n'ignore le nom de l'illustre écrivain Dingley. Les enfants eux-mêmes le connaissent, maint d'entre eux apprend à lire dans ses livres. C'était un homme d'une gaieté, d'une fantaisie, d'une fraîcheur d'imagination incomparable. Il semblait né à l'aurore du monde, dans un temps où les sens des hommes rivalisaient avec ceux des bêtes. Qu'il décrivît une forêt vierge de l'Inde, un office de commerce dans la Cité de Londres, un lever de soleil sur la mer des Tropiques, un crépuscule d'Europe occidentale, sa vision imprévue était celle d'un homme qui ouvrirait sur les spectacles de l'univers des yeux neufs. Ses histoires étaient peintes avec la précision d'un réaliste japonais et la fantaisie d'un poète persan. Les personnages de ses contes habitaient presque tous un pays où la puissante imagination de l'homme épanouit des fleurs merveilleuses, les plaines du Gange, témoins de l'effort le plus désespéré des penseurs pour découvrir un sens à la vie. Son esprit jouait avec les soins des Européens émigrés là-bas et les rêves des philosophes indigènes morts il y a des milliers d'années. Il unissait l'esprit concret des hommes de race anglaise à l'âme insatisfaite et passionnée pour le rêve d'un Hindou ; il avait l'ardeur d'un pirate normand et le goût des siestes, à l'ombre, tandis que dans le champ de la vision intérieure passent, comme un souvenir d'une autre existence, les aventures d'hommes ayant appartenu à d'autres civilisations. Et c'était le jeu même de son esprit qu'il avait représenté dans *la plus belle histoire du monde* où l'on voit un jeune commis du Strand reconstituer, avec l'exactitude d'un homme qui l'aurait soufferte, la vie d'un rameur grec enchaîné au banc d'une galère phénicienne mille ans avant le Christ.

—JÉRÔME ET PAUL THARAUD, *Dingley*.

II. *Translate :*

One more letter to you from here, from this most beautiful part of Switzerland, which, though you have not been

here with us, is yet dear to me from its associations with you. How strange,—our meeting on the boat that lovely summer morning (lovely though rainy, so that you were reading from *Madame de Staël*—or was it *Madame de Genlis*?—in the cabin to your Mother) the beginning of that long voyage on which we then embarked together unknowingly ! How strange, how fortunate that unconscious sympathy that brought us together that day, to ripen into the conscious sympathy which now makes up so large a part of the interests of my life at least ! The talk of thirteen years ago resulting in the letters and talks of this year.

—*The Letters of Charles Eliot Norton.*

### III. *Translate :*

1. Tous les membres auraient dû assister à la conférence.
2. Il faisait le mort. 3. Il valait mieux se taire. 4. Il sait à quoi s'en tenir. 5. On ne peut se passer de cela. 6. Ils doivent être à même de se tirer d'affaire. 7. Il s'était montré on ne peut plus optimiste.

IV. Conjugate the present indicative of *plaire*, the present subjunctive of *vouloir*, the present indicative of *acquérir*, the imperfect subjunctive of *joindre*.

V. Write a short composition of about 200 words on *La France et les Etats-Unis*.

## ELEMENTARY AND INTERMEDIATE ALGEBRA, PLANE GEOMETRY

1. Resolve into factors : a)  $x^3 + 3x^2 - 2$  ;  
b)  $a^2 - 12ab + 36b^2 - t^2$ .

2. The width of a rectangle is 5 feet less than the length. If the length be increased by 2 feet and the width increased 3 feet, the area will be increased 11 sq. ft. Find the area.

3. Solve and discuss the equation

$$\frac{3}{x-5} = \frac{x}{x-4}.$$



4. Had a man's daily wage been \$1 less, he would have been obliged to work 7 days longer to earn \$140. How many days did the man work? Discuss all the solutions of the algebraic problem.

5. Show that the three perpendiculars from the vertices to the opposite sides of a triangle meet in a point, and that the lengths of these perpendiculars are inversely proportional to the sides to which they are perpendicular respectively.

6. Show how to draw a tangent to a given circle from a point outside.

7. Through a given point pass a circle with a given radius which shall touch a given line.

8. The area of an equilateral triangle is  $9\sqrt{3}$ . Determine its side, and the area of its circumscribed circle.





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The Annual Register (for the year 1916-17, published January 1, 1917), price 50 cents.

Book of Views, price 25 cents.

Directory of Faculty and Students, First Term, 1917-18, price 10 cents, and the following informational publications, any one of which will be sent gratis and post-free on request. The date of the last edition of each is given after the title.

General Circular of Information for Prospective Students, December 15, 1916.

Announcement of the College of Arts and Sciences, March 15, 1917.

Announcement of Sibley College of Mechanical Engineering and the Mechanic Arts, January 15, 1917.

Announcement of the College of Civil Engineering, April 15, 1917.

Announcement of the College of Law, May 15, 1917.

Announcement of the College of Architecture, July 1, 1917.

Announcement of the New York State College of Agriculture, June 1, 1917.

Announcement of the Winter Courses in the College of Agriculture, June 15, 1917.

Announcement of the Summer Term in Agriculture, April 1, 1917.

Announcement of the New York State Veterinary College, May 1, 1917.

Announcement of the Graduate School, February 15, 1917.

Announcement of the Summer Session, March 1, 1917.

Annual Report of the President, September 1, 1917.

Pamphlets on prizes, samples of entrance and scholarship examination papers, special departmental announcements, etc.

Announcement of the Medical College may be procured by writing to the Cornell University Medical College, Ithaca, N. Y.